

AMENDMENTS TO THE CLAIMS:

Claims 1-11 (cancelled)

12. (Currently amended) ~~The shoestring tying apparatus of claim 8, wherein said driving mechanism further includes:~~ A shoestring tying apparatus comprising:

a fastening member for tightening a shoestring, said fastening member including a disk to be connected to one end of the shoestring, and including an operating member for rotating said disk so as to wind the shoestring;

a rotational member operable to:

engage said fastening member and rotate said operating member of said fastening member in a winding direction so as to wind the shoestring around said disk when said rotational member is rotated in a predetermined direction, thereby tightening the shoestring;

engage said fastening member and prevent rotation of said operating member of said fastening member in a direction opposite the winding direction when rotation of said rotational member is stopped, thereby maintaining tension of the shoestring; and

disengage said fastening member to allow rotation of said operating member of said fastening member in the direction opposite the winding direction, thereby releasing the tension of the shoestring;

a fitting portion for connecting said rotational member to said operating member of said fastening member; and

a driving mechanism for rotating said rotational member in the predetermined direction, said driving mechanism being operable to manually or automatically rotate said operating member via said rotational member so as to rotate said disk of said fastening member, thereby tightening the shoestring, and said driving mechanism including

(i) a spring member such that as said rotational member is rotated in the predetermined direction said spring member is wound,

(ii) a cylindrical storage member having a rotational shaft, with said spring member fixed to said rotational shaft;

(iii) an operating cord to be wound on an outer circumference of said storage member, and

(iv) a restricting device including an engaging member,

wherein said storage member, said spring member, said operating cord, and said restricting device are arranged and operable to rotate said rotational member in the predetermined direction, and operable to prevent said rotational member from rotating in a direction opposite the predetermined direction.

13. (Previously presented) The shoestring tying apparatus of claim 12, wherein said restricting device further includes a ratchet, said engaging member comprising a pawl arranged in a pawl storage section of said ratchet.

14. (Previously presented) The shoestring tying apparatus of claim 13, wherein said rotational member has an internal gear portion, said restricting device being arranged such that said pawl is operable to engage said internal gear portion of said rotational member.

15. (Previously presented) The shoestring tying apparatus of claim 12, wherein said rotational member is located between said driving member and said fastening member.

Claim 16 (cancelled)

17. (Previously presented) A shoestring tying apparatus comprising:
a fastening member for tightening a shoestring, said fastening member including a disk to be connected to one end of the shoestring, and including an operating member for rotating said disk so as to wind the shoestring;

a rotational member including a cylinder portion and a rotating shaft, said rotational member being operable to:

engage said fastening member and rotate said operating member of said fastening member in a winding direction so as to wind the shoestring around said disk when said rotational member is rotated in a predetermined direction, thereby tightening the shoestring;

engage said fastening member and prevent rotation of said operating member of said fastening member in a direction opposite the winding direction when rotation of said rotational member is stopped, thereby maintaining tension of the shoestring; and

disengage said fastening member to allow rotation of said operating member of said fastening member in the direction opposite the winding direction, thereby releasing the tension of the shoestring;

a fitting portion for connecting said rotational member to said operating member of said fastening member;

an elastic member in said cylinder portion of said rotational member, said elastic member having a first end fixed to said rotating shaft of said rotational member, and being wound when said rotational member is rotated in the predetermined direction so as to tighten the shoestring;

a ratchet in said cylinder portion of said rotational member so as to have the same axis of rotation as said rotational member, said ratchet including a pawl for engaging said rotational member when said ratchet is rotated in the predetermined direction, and for disengaging said rotational member when said ratchet is rotated in a direction opposite the predetermined direction due to an elastic force of said elastic member;

an operating cord to be wound on said cylinder portion of said rotational member; and

a two-piece cover member for storing said fitting portion, said rotational member, said elastic member, said ratchet, and said wound operating cord, said operating cord being arranged to be extracted from said cover member when pulled;

wherein said operating cord, said fitting portion, said rotational member, said elastic member, and said ratchet are arranged such that:

when said operating cord is pulled to be extracted from said cover member, said ratchet is rotated in the predetermined direction and said pawl of said ratchet engages said rotational member so that said rotational member and said fitting portion are rotated in the predetermined direction, and said elastic member is wound;

when said operating cord is released after being extracted from said cover member, said operating cord is wound on said cylinder portion of said rotational member due to the elastic force of said elastic member, and said pawl of said ratchet disengages from said rotational member so that only said ratchet is rotated in the direction opposite the predetermined direction without rotating said rotational member; and

when said operating cord is again pulled to be extracted from said cover member again, said ratchet is rotated in the predetermined direction so that said rotational member is rotated in the predetermined direction.

18. (Previously presented) The shoestring tying apparatus of claim 17, wherein said fitting portion is integrally connected to said rotational member such that said fitting portion and said rotational member have a one-piece construction, said fitting portion having a contact surface for contacting a contact surface of said operating member.

19. (Previously presented) A shoestring tying apparatus comprising:

a fastening member for tightening a shoestring, said fastening member including a disk to be connected to one end of the shoestring, and including an operating member for rotating said disk so as to wind the shoestring;

a rotational member including a fitting portion and a cylinder portion having an internal gear adjacent to said fitting portion, said rotational member being operable to:

engage said fastening member and rotate said operating member of said fastening member in a winding direction so as to wind the shoestring around said disk when said rotational member is rotated in a predetermined direction, thereby tightening the shoestring;

engage said fastening member and prevent rotation of said operating member of said fastening member in a direction opposite the winding direction when rotation of said rotational member is stopped, thereby maintaining tension of the shoestring; and

disengage said fastening member to allow rotation of said operating member of said fastening member in the direction opposite the winding direction, thereby releasing the tension of the shoestring;

a ratchet having pawl-storage sections on an outer circumference thereof, and having a shaft fitting opening at the center thereof;

a plurality of pawls arranged in said pawl-storage sections of said ratchet so as to be forced at all times in an engagement direction by an elastic member to thereby engage said internal gear of said rotational member;

a rotational shaft arranged within said shaft fitting opening of said ratchet and within said cylinder portion of said rotational member;

a spring storage member connected to said ratchet, said spring storage member including a recessed groove on an outer circumference thereof, including a storage space, and including a through-hole for rotatably receiving said rotational shaft;

an operating cord wound on said recessed groove of said spring storage member;

a helical spring stored in said storage space of said spring storage member, said helical spring having a first end fixed to said rotational shaft and having a second end connected to a first end of said operating cord; and

a cover member having a fitting opening at a center of a back surface thereof for receiving and supporting said rotational shaft, said cover member being shaped and arranged to cover said spring storage member and said rotational member, and shaped and arranged to allow a second end of said operating cord to be pulled so as to extract said operating cord from said cover member.

20. (Previously presented) The shoestring tying apparatus of claim 19, wherein said fitting portion is integrally formed on said operating member so that said fitting portion and said operating member have a one-piece construction.

21. (Previously presented) The shoestring tying apparatus of claim 19, wherein said ratchet includes an engaging opening on a side thereof, said spring storage member including a protrusion engaging said engaging opening of said ratchet so as to connect said ratchet to said spring storage member.

22. (Previously presented) The shoestring tying apparatus of claim 19, wherein said cover member includes a back cover portion having said fitting opening at a center thereof, and includes a front cover portion having an opening, said front cover portion being fit to said back cover portion.

23. (Previously presented) The shoestring tying apparatus of claim 19, wherein said fitting portion is integrally connected to said rotational member such that said fitting portion and said rotational member have a one-piece construction, said fitting portion having a contact surface for contacting a contact surface of said operating member.

24. (Previously presented) A shoestring tying apparatus comprising:

- a fastening member for tightening a shoestring, said fastening member including a disk to be connected to one end of the shoestring;

- a rotational member including an internal gear on an inner face thereof, and including an engaging gear, said rotational member being operable to:

- engage said fastening member and rotate said fastening member in a winding direction so as to wind the shoestring around said disk when said rotational member is rotated in a predetermined direction, thereby tightening the shoestring;

- engage said fastening member and prevent rotation of said fastening member in a direction opposite the winding direction when rotation of said rotational member is stopped, thereby maintaining tension of the shoestring; and

- disengage said fastening member to allow rotation of said fastening member in the direction opposite the winding direction, thereby releasing the tension of the shoestring;

- an operating member for rotating said disk of said fastening member so as to wind the shoestring, said operating member including:

- a plurality of pawls on an inner face thereof;

- a cylindrical engaging gear for engaging said engaging gear of said rotational member when said rotational member rotates in the predetermined direction; and

- a gear set;

- a ratchet for engaging said gear set of said operating member;

a spring storage member including a plurality of pawls supported with shafts for engaging said internal gear of said rotational member, and including a helical spring;

an operating cord having an end fixed to an end of said helical spring, or fixed to an outer circumference of said spring storage member, so as to wind up said helical spring of said spring storage member; and

wherein said operating member, said fastening member, said rotational member, said ratchet, said spring storage member, and said operating cord are arranged so that said fastening member is rotated by manually turning said operating member, or by pulling said operating cord so as to rotate said ratchet and said rotational member.

25. (Previously presented) The shoestring tying apparatus of claim 24, wherein said rotational member is located between said driving member and said fastening member.